

SECTION 2 - PUBLIC EDUCATION AND OUTREACH

40 CFR 122.34 (b)(1) – Implement a public education program to distribute educational materials to the community of contact, equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

2.0 OVERVIEW

Public education and outreach is key to the success of a SWMP. Through public education, residents gain an understanding of how their actions affect stormwater quality and become more informed about stormwater quality issues in their community. When citizens understand that poor water quality can result from common everyday activities, a major source of pollutants in stormwater can be voluntarily eliminated. Perhaps more important, an educated public can be a broad base of support for a SWMP. The objectives of a public education program should be to promote a clear identification and understanding of the problem and solutions and to promote community ownership of the problems and solutions.

The City is dedicated to educating the Sugar Land community on how to prevent stormwater pollution. In this regard, the City will provide educational information to the Sugar Land community, and in collaboration with organizations like KSLB, community volunteers will assist in stormwater pollution prevention education.

The City of Sugar Land's public education program will address the following target audiences:

- Adult residents
- Students
- Municipal employees
- Businesses, including commercial and industrial facilities
- Construction site operators

Numerous stormwater public education materials have already been developed by the EPA, state, and local agencies and are available for distribution or reprinting. In addition, the City will coordinate public education efforts with Fort Bend County, LIDs, and municipal utility districts (MUDs) where feasible.

Table 2.1 BMP and measurable goal summary for Public Education and Outreach.

BMP	MEASURABLE GOAL	PERMIT YEAR				
		1	2	3	4	5
Cast grates and manholes	Add revision to detailed notes	X				
Business education/recognition program	Develop & implement program			X		
Mobile business education program	Develop & implement program			X		
Stormwater quality educational materials	Develop & distribute	X				
Municipal website and cable channel	Develop & disseminate info	X				
Student education	Meet with other MS4s	X				
	Distribution of book covers & book cover contest	X				
	Implement school curriculum				X	
Wetlands education	Coordinate wetlands tours	X				
	Wetlands education center				X	

2.1 CAST GRATES AND MANHOLES

Description

Custom-design storm drain cast grates and manholes heighten public awareness about how most drainage systems are directly connected to receiving waters with little or no treatment. Detailed notes on design standards will refer to custom-made cast grates and manholes for new development and redevelopment of infrastructure within the corporate city limits. Existing cast grates and manholes will not be retrofitted unless their replacement is warranted. New developments outside the corporate city limits but within the City's extraterritorial jurisdiction would be contractually required to install cast grates and manholes through development agreements. The grates and manholes would contain the message "Dump No Waste, Drains to Waterways".

Measurable Goals

- Evaluate and modify design standards for cast grates and manholes.
- Add the requirements to detailed notes for new development and redevelopment.

Costs

- Labor – Existing City staff
- Equipment/Supplies – N/A

Implementation Schedule

- Develop requirement criteria and adopt standards in Permit Year 1.

2.2 BUSINESS EDUCATION/RECOGNITION PROGRAM

Description

Sugar Land will establish an incentive program for businesses, which may include recognition plaques, stickers, and/or newsletter recognition. This program may involve

development of a set of guidelines for area businesses or on-site evaluation with recommendations by City employees of practices that will assist the business in minimizing pollution.

As part of the Business Recognition Program, specific guidelines may be developed for certain types of businesses. The City may target certain types of businesses with higher pollution potential by developing a Clean Water Business Partner Program with businesses such as dry cleaners that have a higher pollution potential.

A Pollution Prevention Guide for Businesses that was developed by Galveston Bay Estuary Program can be distributed as part of this program. In addition, TCEQ has a Small Business and Environmental Assistance Program that conducts Pollution Prevention Audits (non-enforcement program). The business education program can use the existing TCEQ pollution prevention auditing capability to assist with the program. The program can be done by nomination or application, with inspections of proposed participants, and could recognize participation in TCEQ pollution prevention audits. Environmentally aware businesses might be more willing to partner with municipalities and sponsor programs. Program costs will vary depending on how the program is implemented. If the program is implemented by nomination or applications, costs are expected to be lower. By using the TCEQ audits and existing resources within the Public Works department, labor needs for this program will be minimal.

Measurable Goals

- A specified number of businesses per year meet criteria for recognition. This number will be determined during the program development, which will occur in Permit Year 3.

Costs

- Labor – Existing City staff
- Equipment/Supplies
 - Plaques/certificates
 - Stickers
 - Guidance brochures or booklets

Implementation Schedule

Develop the Business Education/Recognition Program by Year 3. Begin implementing the program in Permit Year 3.

2.3 MOBILE BUSINESS EDUCATION PROGRAM

Description

In conjunction with the Business Education/Recognition Program, Sugar Land will develop and implement a multi-language mobile business education program. This program would focus on traditionally mobile businesses that are often more difficult to

monitor because they undertake activities at a number of locations. Mobile businesses include lawn maintenance, carpet cleaning, painting and decorating, pest control, and gardening.

Initially, Sugar Land's mobile business education program would be targeted primarily toward lawn maintenance companies, since many homeowners in the community pay a contractor for this service. Eventually, the program can be expanded to include other types of mobile businesses.

The primary objectives of this program would be to educate businesses on ways they can change or improve their work practices to:

- Reduce or avoid stormwater pollution
- Reduce the generation of waste
- Increase resource recovery through recycling, reuse and composting
- Achieve environmental best practices through cleaner production techniques
- Achieve cost savings in terms of reduced materials and water usage
- Improve their environmental image with the local community.

Businesses engaged in landscaping activities should be educated in proper use of landscaping chemicals and in proper green waste disposal. In addition, workers should be trained to pick up any litter before mowing so that the trash doesn't get shredded and washed into the storm drain. The goal of this educational outreach program is to reduce chemical and green waste runoff to natural watercourses. This is accomplished by minimizing the use of herbicides, fertilizers, and insecticides to no more than the recommended levels and by properly disposing of green waste resulting from mowing, tree trimming, weed eating, and edging.

Measurable Goals

- Develop or acquire multi-language training materials on the proper use of landscaping chemicals and the proper disposal of yard waste.
- Implement educational outreach program for lawn maintenance companies that conduct business in Sugar Land.

Costs

- Labor – Existing City staff
- Equipment/Supplies
 - Multi-language training materials
 - Translation costs

Implementation Schedule

Develop or acquire training materials by Permit Year 3. Implement educational outreach program in Permit Year 3.

2.4 STORMWATER QUALITY EDUCATIONAL MATERIALS

Description

The City is required to inform residents about the effects polluted stormwater runoff can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and how they can minimize their effects on stormwater quality. The City must ensure and document that a reasonable attempt was made to reach all constituents within the area.

Sugar Land will develop and distribute printed materials on lawn and garden management, proper handling of household hazardous waste, pet waste, littering, commercial stormwater impacts, waste management, and other stormwater quality related issues. In addition, the City will distribute educational promotional items at community events.

Measurable Goals

- Distribute printed materials and promotional items at community events in which the Public Works department is a participant.
- Distribute printed materials to hotels, real estate agencies, and other similar types of businesses that may have contact with visitors to the area.
- Include information on specific stormwater quality issues in the city newsletter, which will be mailed to residents six times per year beginning in FY 2005.

Costs

- Labor – Existing City staff
- Equipment/Supplies
 - Printed materials
 - Promotional giveaways

Implementation Schedule

Initial print materials will be developed in Permit Year 1, with ongoing development and distribution throughout the permit term.

2.5 MUNICIPAL WEBSITE & MUNICIPAL CABLE CHANNEL

Description

Sugar Land will use the municipal website and municipal cable channel to inform the public about the SWMP. The City website presently contains information about non-point source (NPS) pollution and the impact that NPS pollution has on water quality. However, this information is embedded in the Public Works Department, Street/Drainage Division web pages. As part of the SWMP, the City will make the stormwater information more prominent on the website and fewer clicks away from the main page. The web page will include general stormwater quality information, as well as topics of

interest to the general public such as litter control and proper management of pesticides, fertilizer, used oil, and household hazardous waste. The municipal channel, which should be in operation by FY 2005, will be used to disseminate messages regarding stormwater pollution prevention.

Measurable Goals

- Placement of stormwater information on website.
- Placement of stormwater information on municipal channel.
- Quarterly update of information.

Costs

- Labor – Existing City staff
- Equipment/Supplies – N/A

Implementation Schedule

Develop and place information on the City website and municipal channel in Permit Year 1. Update information on a quarterly basis.

2.6 STUDENT EDUCATION

Description

Sugar Land will seek opportunities to partner with local schools in presenting curriculum on water conservation and water quality. The City will work with Keep Sugar Land Beautiful (KSLB), other municipalities, municipal utility districts (MUDs) in the County, and Fort Bend Independent School District to evaluate the opportunity to create a district-wide education program to meet all county MS4 needs. The City will continue to sponsor an annual water quality and conservation book cover contest through Fort Bend Independent School District and to provide 15,000 book covers of the winners' artwork to area schools. The City will also continue to provide an additional 25,000 book covers on specific stormwater related issues to area schools.

Measurable Goals

- Hold at least one meeting per year with other MS4s in Fort Bend County.
- Hold water quality and conservation book cover contest annually and provide 15,000 book covers of winning artwork to area schools.
- Provide 25,000 book covers on stormwater related issues to area schools.

Costs

- Labor – Existing City staff
- Equipment/Supplies
 - Curriculum guides

- Book covers
- Teacher training
- Supporting teaching resources

Implementation Schedule

Continue to hold book cover contest and distribute book covers to area schools. Evaluate opportunity to collaborate with other entities on school curriculum in Permit Years 1-4, with a target implementation of Permit Year 4, if such a program is feasible.

2.7 WETLANDS EDUCATION

Description

There are wetlands areas within the corporate city limits that provide a valuable learning opportunity for school age and/or adult groups. Currently, KSLB volunteers give tours of wetlands sites upon request. These tours could be made available as part of the stormwater education curriculum for adults and school-age children. One of the wetlands areas is on property currently owned by Imperial Sugar. The City will work to encourage Imperial Sugar to continue operations of the wetlands until the City is able to successfully negotiate purchase of the property. In addition, the City will evaluate the budgetary feasibility of establishing a permanent wetlands education center that would promote stormwater quality education.

Measurable Goals

- The City, with volunteer support, will provide wetlands educational tours in each permit year as long as the facilities are available. The number of tours will vary depending on the number of requests the City receives and the availability of volunteer resources.

Costs

- Labor – TBD
- Equipment/Supplies – TBD

Implementation Schedule

Community volunteers will provide wetlands tours each permit year, beginning in Permit Year 1 (provided that facilities are available for public use). In Permit Year 4, the City will evaluate the feasibility of developing a permanent Wetlands Education Center.